

Application No.: 10/028,482

REMARKS/ARGUMENTS

Applicants have amended claims 1, 4, 15, 16, and 18-25. Support for the amendments to the claims may be found in the originally filed claims and specification. Claim 1 has been amended to clarify that the sample preparation method comprises a method for amplifying regions of interest and for pooling aliquots. Support for this amendment may be found at page 32, lines 13-17. Claim 1 has been amended to add the limitation that the probe array loader comprises a robotic arm and a refrigerated unit. Support for this amendment may be found on page 34, lines 5 and 6. Claim 1 has also been amended to add the limitation that the system includes a plurality of high density probe arrays and to clarify that the genotyping calls are made by analyzing the hybridization data resulting from hybridizing amplified regions of interest to a high density nucleic acid probe array. Support for these amendments may be found, for example, on page 33, lines 12-14 of the specification and in figure 4. Applicants reserve the right to pursue the subject matter of the canceled claims in related applications. Applicants assert that no new matter is presented by these amendments and respectfully request entry of the same. Applicants do not disclaim any subject matter to which they are entitled.

Objections to the Specification

Applicants have amended the specification to remove embedded hyperlinks and/or other forms of browser-executable code.

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Claims Rejected Under 35 U.S.C §112, First Paragraph

Claim 16 has been amended to replace “at least 35 kilobases” with “about 30 kilobases”. Claim 22 has been amended to replace “at least” with “about” and to replace “kb” with “kilobases”. Applicants respectfully submit in view of the above amendments, the rejection of Claims 16 and 22 under 35 U.S.C §112, first paragraph, should be withdrawn.

Claims Rejected Under 35 U.S.C §112, Second Paragraph

Applicants have amended Claim 1 to clarify that genotyping calls are made for a plurality of single nucleotide positions in a region of interest using hybridization data obtained by hybridizing a sample to a high density nucleic acid probe array.

Claims 15 and 16 have been amended to replace the phrase “one day” with “one 8 hour work day”.

Claims 18-20 and 22 have been amended to replace “PCR” with “polymerase chain reaction” and “kb” with “kilobases”.

Claim 4 has been amended to correct errors in antecedent basis and to agree with the language of amended claim 1.

Claim 21 was rejected because of an alleged lack of clarity of the phrase “feature sizes”. Applicant has amended claim 1, from which claim 21 depends, to clarify that features refer to particular features within the array that differ in the sequence of the probes that are present within the feature.

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In summary, applicants respectfully submit that in view of the above remarks and amendments, all pending claim meet the requirements of 35 U.S.C §112, second paragraph.

Claims Rejected Under 35 U.S.C §102(a) and (e)

The Examiner has rejected claims 1-4, 17, 18, 20 and 26 in view of Bass et al. (2001/0039014A1). Independent claim 1 has been amended to clarify that the system of the claimed invention includes a plurality of high density nucleic acid probe arrays and each array comprises about 400,000 different sequence probes. Bass et al. does not disclose a system with a plurality of high density nucleic acid probe arrays as claimed. Applicants also respectfully disagree with the Examiner assertion that a nucleic acid shuffling module as disclosed in Bass et al. represents an automated high density array loader. A high density probe array loader transports arrays. A nucleic acid shuffling module, as described in Bass et al. (2001/0039014 A1), dispenses nucleic acids and reaction mixtures into multiwell plates.


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Conclusion

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. Please deduct any additional fees from, or credit any overpayment to the undersigned's Deposit Account No. 01-0431. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5000.

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Respectfully submitted,



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